INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: March 1, 2005

RE: GKN Sinter Metals / 175-20269-00011

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 1/10/05

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Mr. Erl Haapanen
GKN Sinter Metals
P.O. Box 312 Becks Mill Road
Salem, Indiana 47167

March 1, 2005

Re: 175-20269-00011
Second Notice Only Change
MSOP 175-15094-00011

Dear Mr. Haapanen:

GKN Sinter Metals was issued a Minor Source Operating Permit No.: 175-15094-00011 on February 4, 2002 for an iron sintering plant. A letter requesting the Office of Air Quality for a notice-only change was received on January 06, 2005. The change is related to the addition of one (1) high temperature sintering furnace, using natural gas at the rate of 0.775 mmBtu per hour. The potential to emit of all criteria pollutants is determined to be lower than exemption levels as defined in 326 IAC 2-1.1-3(d). The potential to emit of PM is less than 0.551 pounds per hour, and thus the sintering furnace is exempt from the requirements of 326 IAC 6-3-2. The addition of one (1) high temperature sintering furnace is therefore considered as descriptive change of the source and revised as a Notice Only Change, pursuant to 2-6.1-6 (d) (2).

(1) Sections A.2 of MSOP permit is revised as follows (Deletions are marked with a strikeout and the new information is in bold):

(a) Five (5) natural gas fired sintering furnaces, identified as 507-01 through 507-05, each rated at 2.45 million Btu per hour heat input and 600 pounds of iron powder per hour.

(b) Sixteen (16) natural gas fired sintering furnaces, identified as 507-07 through 507-22, each rated at 2.45 million Btu per hour heat input and 600 pounds of iron powder per hour.

(c) One (1) natural gas fired sintering furnace, identified as 507-24, rated at 3.25 million Btu per hour heat input and 2000 pounds of iron powder per hour.

(d) Two (2) natural gas fired sintering furnaces, identified as 511-03 and 511-05, each rated at 0.145 million Btu per hour heat input and 600 pounds of iron powder per hour.

(e) One (1) electric sintering furnace, identified as 526-06, rated at 200 pounds of iron powder per hour.

(f) Two (2) powder blending units, identified as 530-01 and 530-02, each rated at 1470 pounds of iron powder per hour, controlled by one (1) dust collector.

(g) Secondary machining operations consisting of wet grinding, lathe turning, drilling, tapping, and vibratory deburring.

(h) One (1) dust collector, identified as 530-7.

(i) Five (5) natural gas fired endothermic gas generators, identified as 507-100 through 507-105, each rated at 0.25 million Btu per hour heat input.

(j) Two (2) natural gas fired endothermic gas generators, identified as 507-108 and 507- 109, each rated at 0.25 million Btu per hour heat input.

(k) Two (2) natural gas fired endothermic gas generators, identified as 507-111 and 507-112, each rated at 0.25 million Btu per hour heat input.

(l) One (1) natural gas fired endothermic gas generator, identified as 507-113, rated at 0.75 million Btu per hour heat input.

(m) One (1) natural gas fired boiler, identified as 512-22-2, rated at 0.0382 million Btu per hour heat input. This boiler was constructed in 1971.

(n) One (1) natural gas fired boiler, identified as 512-01, rated at 0.126 million Btu per hour heat input. This boiler was constructed in June, 1995.

(o) one (1) natural gas fired draw furnace, identified as 511-06, rated at 0.5 mmBtu per hour and 800 pounds of iron per hour.

(p) one (1) natural gas fired sintering furnace, identified as 507-25, rated at 0.775 mmBtu per hour with a maximum capacity of 300 pounds of iron powder per hour.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this letter and the attached revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Rajesh Thotakura, at (973) 575-2555, ext. 3216 or dial (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
RT/EVP
cc: File - Washington County
U.S. EPA, Region V
Washington County Health Department
Air Compliance Section Inspector - Ray Schick
Compliance Data Section - Karen Ampil
Administrative and Development
Technical Support and Modeling - Michele Boner

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MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

GKN Sinter Metals, Inc.
P.O Box 312 Becks Mill Road
Salem, Indiana 47167

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: 175-15094-00011	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: February 4, 2002 Expiration Date: February 4, 2007

First Notice Only Change No.: 175-16756-00011, issued March 5, 2003

Second Notice Only Change No.: 175-20269-00011 Pages Affected: 5	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: March 1, 2005

(j) Two (2) natural gas fired endothermic gas generators, identified as 507-108 and 507- 109, each rated at 0.25 million Btu per hour heat input.

(k) Two (2) natural gas fired endothermic gas generators, identified as 507-111 and 507-112, each rated at 0.25 million Btu per hour heat input.

(l) One (1) natural gas fired endothermic gas generator, identified as 507-113, rated at 0.75 million Btu per hour heat input.

(m) One (1) natural gas fired boiler, identified as 512-22-2, rated at 0.0382 million Btu per hour heat input. This boiler was constructed in 1971.

(n) One (1) natural gas fired boiler, identified as 512-01, rated at 0.126 million Btu per hour heat input. This boiler was constructed in June, 1995.

(o) one (1) natural gas fired draw furnace, identified as 511-06, rated at 0.5 mmBtu per hour and 800 pounds of iron per hour.

(p) one (1) natural gas fired sintering furnace, identified as 507-25, rated at 0.775 mmBtu per hour with a maximum capacity of 300 pounds of iron powder per hour.

Appendix A: Emissions Calculations

Potential Emissions from Sintering Furnace (507-25)
MM BTU/HR <100

Company Name: GKN Sinter Metals
Address City IN Zip: P.O. Box 132 Becks Mill road
Part 70 Pemit: T-117-20269-00011
Reviewer: RT/EVP
Date: 02-16-05

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.8	6.8

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.006	0.026	0.002	0.339	0.019	0.285

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only
MM BTU/HR <100
Sintering Furnace
HAPs Emissions

Company Name: GKN Sinter Metals
Address City IN Zip: P.O. Box 132 Becks Mill road
Part 70 Pemit: T-117-20269-00011
Reviewer: RT/EVP
Date: 02-16-05

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	7.128E-06	4.073E-06	2.546E-04	6.110E-03	1.154E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.697E-06	3.734E-06	4.752E-06	1.290E-06	7.128E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.